

Claims:

23. (previously presented) A method for detecting HIV antibodies employing a dry chemistry test strip to measure the HIV antibodies concentration in a urine or blood without the use of ELISA and HPLC method for analysis of HIV antibodies, wherein the said method comprises the steps of preparing a test means by successively impregnating an absorbent carrier matrix with reagent solutions consisting essentially of;

- a) buffer and enzyme conjugated to HIV antigen; and
- b) indicator substrate complex,

drying said test means, dipping completed test means into test sample, and determining the quantity of HIV antibodies present in said test sample by comparing the relative intensity of the color produced by the reaction of HIV antibody ~~to the test means and comparing the color produced~~ to a color chart with color blocks referenced to specific concentrations of HIV antibodies such that low antibody concentration would result in an increase in color and a high concentration of antibodies would result in a decrease in color concentration.

24. (previously presented) The method according to claim 23 wherein the said enzyme is selected from the group consisting of Galactodidase, Cellobiosidase, Arabinosidase, Fucosidase, Galactosaminidase, Glucosaminidase, Glucosidase, Glucuronidase, Lactosidase, Maltosidase, Mannosidase, or Xylosidase.

25. (previously presented) The method according to claim 23 wherein the said indicator substrate complex is selected from the group consisting of 5-bromo-6-chloro-3-indoxyl-beta-D-galactopyranoside, 4-Aminophenyl-beta-D-galactopyranoside, 3-indoxyl-beta-D-galactopyranoside, 5-Bromo-4-chloro-3-indoxyl-beta-D-galactopyranoside, 5-Bromo-3-indoxyl-beta-D-galactopyranoside, 6-chloro-3-indoxyl-beta-D-galactopyranoside, 6-Fluoro-3-indoxyl-beta-D-galactopyranoside, 8-Hydroxyquinoline-beta-D-galactopyranoside, 5-Iodo-3-indoxyl-beta-D-galactopyranoside, N-Methylindoxyl-beta-D-galactopyranoside, 2-Nitrophenyl-beta-D-galactopyranoside, 4-Nitrophenyl-beta-D-

galactopyranoside, Naphthol AS-BI-beta-D-galactopyranoside, and 2-Naphthyl-beta-D-galactopyranoside or 4-Methylumbelliferyl-beta-D-glucuronic acid.

26. (previously presented) The method according to claim 23 wherein said buffer is selected from the group consisting of citrate, hepes, tris (trizma), taps, popso, tes, mopso, tricine, mops, mes, bicine, bes, caps, epps, dipso, ches, capso, amppo, aces, ada, bis-tris-propane, tapso, heppso, tea, amp, phosphate, phthalate, succinate, hydrochloric acid, sulfuric acid, nitric acid, acetic acid, sodium hydroxide, or potassium hydroxide.

27. (previously presented) A method for detecting HIV antibodies employing a dry chemistry test strip to measure the HIV antibodies concentration in a urine or blood without the use of ELISA and HPLC method for analysis of HIV antibodies, wherein the said method comprises the steps of preparing a test means by successively impregnating an absorbent carrier matrix with reagent solutions consisting essentially of;

a) buffer, horseradish peroxidase conjugated to HIV antigen; and

b) buffer, tetramethylbenzidine, and urea peroxide,

drying said test means, dipping completed test means into test sample, and determining the quantity of HIV antibodies present in said test sample by comparing the relative intensity of the blue color produced by the reaction of HIV antibody to the test means and ~~comparing the color produced~~ to a color chart with color blocks referenced to specific concentrations of HIV antibodies such that low antibody concentration would result in an increase in blue color and a high concentration of antibodies would result in a decrease in blue color concentration.

28. (previously presented) The method according to claim 27 wherein said tetramethylbenzidine can be substituted with one of the following selected from the group consisting of 2,2'-Azino-di-(3-ethylbenzthiazolinesulfonic acid) diammonium salt, 3-Amino-9-ethyl carbazole, 2-5, dimethyl-2,5-dihydroperoxyhexane, Bis{4-[N-(3'-sulfo-n-propyl)-N-n-ethyl]amino-2,6-dimethylphenyl}methane, N-Ethyl-N-(2-hydroxy-3-sulfopropyl)-3-methoxyaniline, N-Ethyl-N-(3-sulfopropyl)-3-methoxyaniline, N-Ethyl-N-(2-hydroxy-3-sulfopropyl)aniline, N-Ethyl-N-(3-sulfopropyl)-3,5-dimethylaniline, N-

Ethyl-N-(2-hydroxy-3-sulfopropyl)-3-methylaniline, N-Ethyl-N-(3-sulfopropyl)-3-methylaniline, N-(3-sulfopropyl)aniline, N-Ethyl-N-(2-hydroxy-3-sulfopropyl)-3,5-dimethoxy-aniline, N-Ethyl-N-(3-sulfopropyl)-3,5-dimethoxyaniline, N-Ethyl-N-(3-sulfopropyl)aniline, N-(2-hydroxy-3-sulfopropyl)-3,5-dimethoxyaniline, N-(3-sulfopropyl)-3,5-dimethoxyaniline, N-Ethyl-N-(2-hydroxy-3-sulfopropyl)-3,5-dimethylaniline, N,N-Bis(4-sulfobutyl)-3,5-dimethylaniline, pyrogallol, 4-aminoantipyrine, 2,4-Dichlorophenol, N,N-Diethyl-m-toluidine, p-Hydroxybenzene Sulfonate, N,N-Dimethylaniline, 3,5-Dichloro-2-Hydroxybenzenesulfonate, Sodium N-Ethyl-N-(3-Sulfopropyl)-m-Anisidine, N-Ethyl-N-(2-hydroxy-3-Sulfopropyl)-m-toluidine 3-Methyl-2-benzothiazolinonehydrazone or Dimerhylaniline.

29. (previously presented) The method according to claim 27 wherein said buffer is selected from the group consisting of citrate, hepes, tris (trizma), taps, popso, tes, mopso, tricine, mops, mes, bicine, bes, caps, epps, dipso, ches, capso, ampso, aces, ada, bis-tris-propane, tapso, heppso, tea, amp, phosphate, phthalate, succinate, hydrochloric acid, sulfuric acid, nitric acid, acetic acid, sodium hydroxide, or potassium hydroxide.